No. 9600245

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Asgrow Seed Company

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED, PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, [illegible] CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE , OR USING IT IN [illegible]DUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY [illegible]ECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

SOYBEAN

'A2833'

In Testimony Whereof, *I have hereunto set my hand and caused the seal of the* Plant Variety Protection Office *to be affixed at the City of Washington, D.C. this thirty-first day of March, in the year of our Lord two thousand.*

Attest:

Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Secretary of Agriculture

REPRODUCE LOCALLY. *Include form number and date on all reproductions.* FORM APPROVED - OMB NO. 0581-0055

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE DIVISION - PLANT VARIETY PROTECTION OFFICE

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

(Instructions and information collection burden statement on reverse)

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a).

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S) *(as it is to appear on the Certificate)*
ASGROW SEED COMPANY

2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER
FP2833
FR2833

3. VARIETY NAME
A2833

4. ADDRESS *(Street and No., or R.F.D. No., City, State, and ZIP Code, and Country)*
7089-248-23
2605 East Kilgore Road
Kalamazoo, MI 49001

5. TELEPHONE *(include area code)*
616-384-5548

6. FAX *(include area code)*
616-384-5652

FOR OFFICIAL USE ONLY

PVPO NUMBER 9600245

FILING DATE 4-30-96

FEES RECEIVED
FILING AND EXAMINATION FEE: $ 2450.00 DATE 4-30-96
CERTIFICATION FEE: $ 300 DATE 12/16/99

7. GENUS AND SPECIES NAME
Glycine max

8. FAMILY NAME *(Botanical)*
Leguminosae

9. CROP KIND NAME *(Common name)*
Soybean

10. IF THE APPLICANT NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION *(corporation, partnership, association, etc.) (Common name)*
Corporation

11. IF INCORPORATED, GIVE STATE OF INCORPORATION
Delaware

12. DATE OF INCORPORATION
March 22, 1968

13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS

Wayne Hoener, 7089-248-23
Asgrow Seed Company
2605 East Kilgore Road
Kalamazoo, MI 49002-1744

Dr. Alan K. Walker
Asgrow Seed Company
5926 E. U.S. Highway 14
Janesville, WI 53546-8655

14. TELEPHONE *(include area code)*
616-384-5548
608-755-1777

15. FAX *(include area code)*
616-384-5652
608-755-0128

16. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED *(Follow instructions on reverse)*

a. [X] Exhibit A. Origin and Breeding History of the Variety
b. [X] Exhibit B. Statement of Distinctness
c. [X] Exhibit C. Objective Description of the Variety
d. [X] Exhibit D. Additional Description of the Variety
e. [X] Exhibit E. Statement of the Basis of the Applicant's Ownership
f. [X] Voucher Sample *(2,500 viable untreated seeds or, for tuber propagated varieties verification that tissue culture will be deposited and maintained in a public repository)*
g. [X] Filing and Examination Fee ($2,450), made payable to "Treasurer of the United States" *(Mail to PVPO)*

17. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY, AS A CLASS OF CERTIFIED SEED? *(See Section 83(a) of the Plant Variety Protection Act)?*
[ ] YES *(If "yes," answer items 18 and 19 below)* [X] NO *(If "no," go to item 20)*

18. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?
[ ] YES [X] NO

19. IF "YES" TO ITEM 18, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED?
[ ] FOUNDATION [ ] REGISTERED [ ] CERTIFIED

20. HAS THE VARIETY OR A HYBRID PRODUCED FROM THE VARIETY BEEN RELEASED, USED, OFFERED FOR SALE, OR MARKETED IN THE U.S. OR OTHER COUNTRIES?
[ ] YES *(If "yes," give names of countries and dates)* [X] NO

21. The applicant(s) declare that a viable sample of basic seed of the variety will be furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate.

The undersigned applicant(s) is(are) the owner(s) of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 41, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.

Applicant(s) is(are) informed that false representation herein can jeopardize protection and result in penalties.

SIGNATURE OF APPLICANT *(Owner(s))*		SIGNATURE OF APPLICANT *(Owner(s))*	
NAME *(Please print or type)* Wayne Hoener		NAME *(Please print or type)* Alan K. Walker	
CAPACITY OR TITLE Soybean Product Manager	DATE 4/3/96	CAPACITY OR TITLE Director Soybean Research	DATE 4/3/96

ASGROW SEED COMPANY
PVP APPLICATION A2833 SOYBEAN
April, 1996

EXHIBIT A
ORIGIN AND BREEDING HISTORY OF A2833

1989 Cross K8915078 was made in Kalamazoo, Michigan, in the winter. Parentage: A2396*XP3299

1989-90 F1 and F2 generation was grown near Isabela, Puerto Rico and advanced using modified pedigree selection. F3 bulk populations were grown in Costa Rica and single plants pulled.

1990 F3 derived plant rows were grown at Kalamazoo. Plant row CR90-92 was selected based on agronomic characteristics.

1991 CR90-92 was entered in yield test 1KP282 as entry 43, at 3 locations where it placed 6 of 50 entries.

1992 CR90-92 was entered in a 13 location yield test as entry 24, where it placed first of 50 entries.

1993 Now named XI2833, the line was entered in two tests, at a total of 30 test-locations, where it placed second of 33 and 20 entries respectively.

Single F7 plants were pulled at Ames, Iowa. From these SPS's, pure rows of seed was produced at Isabela, Puerto Rico.

1994 Now named FR2833, the line was entered in two company wide yield tests, at a total of 33 test-locations, where it ranked first and fourth respectively. A maintenace yield test to produce breeder seed was grown and 24 tawny lines were bulked.

1995 Now named FP2833, the line was entered in a total of 40 test-locations in two company wide tests, where it ranked ninth and sixth respectively.

A2833 is uniform and stable within commercially acceptable limits based on trial observations since 1990. As with other soybean varieties, variants can occur for almost any characteristic during the course of repeated sexual reproduction.

Asgrow Seed Company
PVP Application A2833 Soybean
April, 1996

EXHIBIT B
NOVELTY STATEMENT CONCERNING A2833 SOYBEAN

To our knowledge, the soybean varieties that closely resemble A2833 are A2396 and A2835

1. Pubescence Color	A2833 - Tawny A2396 - Gray A2835 - Gray
2. Hilum Color	A2833 - Black A2396 - Imperfect black A2835 - Imperfect black
3. Phytophthora Root Rot	A2833 - Rps1k A2396 - Rps1a A2835 - Rps1c
4. Maturity	A2833 - 127 days A2396 - 122 days A2835 - 127 days

FORM APPROVED: OMB NO. 0581-0055

EXHIBIT C
(Soybean)

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
LIVESTOCK, MEAT, GRAIN & SEED DIVISION
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MARYLAND 20705

OBJECTIVE DESCRIPTION OF VARIETY
SOYBEAN (Glycine max L.)

NAME OF APPLICANT(S)	TEMPORARY DESIGNATION	VARIETY NAME
ASGROW SEED COMPANY	FP2833; FR2833	A2833

ADDRESS *(Street and No., or R.F.D. No., City, State, and Zip Code)*
2605 East Kilgore Road
6848-248-013
Kalamazoo, MI 49001

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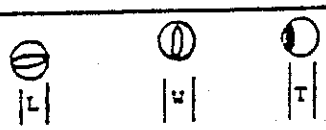
Choose the appropriate response which characterizes the variety in the features described below. When the number of significant digits in your answer is fewer than the number of boxes provided, place a zero in the first box when number is 9 or less (e.g., [0][9]). Starred characters ★ are considered fundamental to an adequate soybean variety description. Other characters should be described when information is available.

1. SEED SHAPE:

[2]



1 = Spherical (L/W, L/T, and T/W ratios = < 1.2)
2 = Spherical Flattened (L/W ratio > 1.2; L/T ratio = < 1.2)
3 = Elongate (L/T ratio > 1.2; T/W = < 1.2)
4 = Elongate Flattened (L/T ratio > 1.2; T/W > 1.2)

★ 2. SEED COAT COLOR: (Mature Seed)

[1] 1 = Yellow 2 = Green 3 = Brown 4 = Black 5 = Other *(Specify)* _____

3. SEED COAT LUSTER: (Mature Hand Shelled Seed)

[1] 1 = Dull ('Corsoy 79'; 'Braxton') 2 = Shiny ('Nebsoy'; 'Gasoy 17')

★ 4. SEED SIZE: (Mature Seed)

[1][5] Grams per 100 seeds

★ 5. HILUM COLOR: (Mature Seed)

[6] 1 = Buff 2 = Yellow 3 = Brown 4 = Gray 5 = Imperfect Black 6 = Black 7 = Other *(Specify)* _____

★ 6. COTYLEDON COLOR: (Mature Seed)

[1] 1 = Yellow 2 = Green

★ 7. SEED PROTEIN PEROXIDASE ACTIVITY:

[1] 1 = Low 2 = High

★ 8. SEED PROTEIN ELECTROPHORETIC BAND:

[2] 1 = Type A ($SP1^a$) 2 = Type B ($SP1^b$)

★ 9. HYPOCOTYL COLOR:

[3] 1 = Green only ('Evans'; 'Davis') 2 = Green with bronze band below cotyledons ('Woodworth'; 'Tracy')
3 = Light Purple below cotyledons ('Beeson'; 'Pickett 71')
4 = Dark Purple extending to unifoliate leaves ('Hodgson'; 'Coker Hampton 266A')

★10. LEAFLET SHAPE:

[3] 1 = Lanceolate 2 = Oval 3 = Ovate 4 = Other *(Specify)* _____

FORM AMS-470-6-1 (6-87) (Edition of 2-82 is obsolete.)

11. LEAFLET SIZE:

[2] 1 = Small ('Amsoy 71'; 'A5312') 2 = Medium ('Corsoy 79'; 'Gasoy 17')
3 = Large ('Crawford'; 'Tracy')

12. LEAF COLOR:

[3] 1 = Light Green ('Weber'; 'York') 2 = Medium Green ('Corsoy 79'; 'Braxton')
3 = Dark Green ('Gnome'; 'Tracy')

★ 13. FLOWER COLOR:

[2] 1 = White 2 = Purple 3 = White with purple throat

★ 14. POD COLOR:

[1] 1 = Tan 2 = Brown 3 = Black

★ 15. PLANT PUBESCENCE COLOR:

[2] 1 = Gray 2 = Brown (Tawny)

16. PLANT TYPES:

[2] 1 = Slender ('Essex'; 'Amsoy 71') 2 = Intermediate ('Amcor'; 'Braxton')
3 = Bushy ('Gnome'; 'Govan')

★ 17. PLANT HABIT:

[3] 1 = Determinate ('Gnome'; 'Braxton') 2 = Semi-Determinate ('Will')
3 = Indeterminate ('Nebsoy'; 'Improved Pelican')

★ 18. MATURITY GROUP:

[0][5] 1 = 000 2 = 00 3 = 0 4 = I 5 = II 6 = III 7 = IV 8 = V
9 = VI 10 = VII 11 = VIII 12 = IX 13 = X

★ 19. DISEASE REACTION: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)

BACTERIAL DISEASES:

★ [0] Bacterial Pustule (*Xanthomonas phaseoli* var. *sojensis*)

★ [0] Bacterial Blight (*Pseudomonas glycinea*)

★ [0] Wildfire (*Pseudomonas tabaci*)

FUNGAL DISEASES:

★ [0] Brown Spot (*Septoria glycines*)

Frogeye Leaf Spot (*Cercospora sojina*)

★ [0] Race 1 [0] Race 2 [0] Race 3 [0] Race 4 [0] Race 5 [0] Other (*Specify*) _____

[0] Target Spot (*Corynespora cassiicola*)

[0] Downy Mildew (*Peronospora trifoliorum* var. *manshurica*)

[0] Powdery Mildew (*Microsphaera diffusa*)

★ [2] Brown Stem Rot (*Cephalosporium gregatum*)

[0] Stem Canker (*Diaporthe phaseolorum* var. *caulivora*)

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19. DISEASE REACTION: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant) (Continued)

FUNGAL DISEASES: (Continued)

★ [0] Pod and Stem Blight *(Diaporthe phaseolorum var; sojae)*

[0] Purple Seed Stain *(Cercospora kikuchii)*

[0] Rhizoctonia Root Rot *(Rhizoctonia solani)*

Phytophthora Rot *(Phytophthora megasperma var. sojae)*

★ [2] Race 1 [2] Race 2 [2] Race 3 [2] Race 4 [2] Race 5 [0] Race 6 [2] Race 7

[2] Race 8 [2] Race 9 [2] Other *(Specify)* 10, 11, 13, 14, 18, 21, 26

Race 21 = 1 (susceptible) (BT. 7/17/2003: per applicant's representative Dr. Steffen) approval

VIRAL DISEASES:

[0] Bud Blight (Tobacco Ringspot Virus)

[0] Yellow Mosaic (Bean Yellow Mosaic Virus)

★ [0] Cowpea Mosaic (Cowpea Chlorotic Virus)

[0] Pod Mottle (Bean Pod Mottle Virus)

★ [0] Seed Mottle (Soybean Mosaic Virus)

NEMATODE DISEASES:

Soybean Cyst Nematode *(Heterodera glycines)*

★ [0] Race 1 [0] Race 2 [0] Race 3 [0] Race 4 [0] Other *(Specify)* _____

[0] Lance Nematode *(Hoplolaimus Colombus)*

★ [0] Southern Root Knot Nematode *(Meloidogyne incognita)*

★ [0] Northern Root Knot Nematode *(Meloidogyne Hapla)*

[0] Peanut Root Knot Nematode *(Meloidogyne arenaria)*

[0] Reniform Nematode *(Rotylenchulus reniformis)*

[ ] OTHER DISEASE NOT ON FORM *(Specify)*: _____

20. PHYSIOLOGICAL RESPONSES: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)

★ [2] Iron Chlorosis on Calcareous Soil

[ ] Other *(Specify)* _____

21. INSECT REACTION: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)

[0] Mexican Bean Beetle *(Epilachna varivestis)*

[0] Potato Leaf Hopper *(Empoasca fabae)*

[0] Other *(Specify)* _____

22. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED.

CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
Plant Shape	A2835	Seed Coat Luster	A2835
Leaf Shape	A2835	Seed Size	A2835
Leaf Color	A2722	Seed Shape	A2835
Leaf Size	A2722	Seedling Pigmentation	A2835

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22. GIVE DATA FOR SUBMITTED AND SIMILAR STANDARD VARIETY: Paired Comparison Data

VARIETY	NO. OF DAYS MATURITY	PLANT LODGING SCORE	CM PLANT HEIGHT	LEAFLET SIZE		SEED CONTENT		SEED SIZE G/100 SEEDS	NO. SEEDS/ POD
				CM Width	CM Length	% Protein	% Oil		
A2833 Submitted	127	1.3	82	77	100	41.4	19.8	15.2	2.02
A2835 Name of Similar Variety	125	1.8	88	75	95	40.6	19.2	14.6	1.74

PUBLICATIONS USEFUL AS REFERENCE AIDS FOR COMPLETING THIS FORM:

1. Caldwell, B.E., ed. 1973. Soybeans: Improvement, Production, and Uses. Amer. Soc. Agron. Monograph No. 16.

2. Buttery, B.R. and R.I. Buzzell. 1968. Peroxidase activity in seeds of soybean varieties. Crop Sci., 8: 722-725.

3. Hymowitz, T. 1973. Electrophoretic analysis of SBTI-A_2 in the USDA soybean germplasm collection. Crop Sci., 13: 420-421.

4. Payne, R.C. and L.F. Morris. 1976. Differentiation of soybean cultivars by seedling pigmentation patterns. J. Seed Technol. 1: 1-19.

ASGROW SEED COMPANY
PVP APPLICATION A2833 SOYBEAN
April, 1996

EXHIBIT D
ADDITIONAL DESCRIPTION OF VARIETY

A2833 is a late maturity group II variety with Rps1k, conferring resistance to most races of phytophora root rot. It is an improved plant type, with better lodging resistance and is adapted across all row widths and soil types. A2833 has excellent yield potential and is adapted across all the late Group II growing area. It has excellent defensive traits, including BSR resistance and good ratings for Iron Deficiency Chlorosis, as well as excellent seedling emergence.

ASGROW SEED COMPANY
PVP APPLICATION A2833 SOYBEAN
April, 1996

EXHIBIT E

STATEMENT OF BASIS OF APPLICANT OWNERSHIP

A2833 was originated and developed by Dr. Kevin Matson, an Asgrow soybean breeder. By agreement with Asgrow Seed Company, all rights to any invention, discovery or development made by employees are assigned to the company. No rights of such invention, discovery or development are returned to the employee.